

## AP Psychology Essential Information

### Introduction to Psychology

1. What is the definition of **psychology**?
  - a. The study of behavior and mental processes
2. How did psychology as a study of behavior and mental processes develop?
  - a. The roots of psychology can be traced back to the philosophy of **Empiricism**: emphasizing the role of experience and evidence, especially sensory perception, in the formation of ideas, while discounting the notion of innate ideas.- Greeks like Socrates, Plato and Aristotle. Later studied by Francis Bacon, Rene Decartes and John Locke.
3. What is the historical development of psychology?
  - a. The evolution of psychology includes structuralism, functionalism, psychoanalysis, behaviorism and Gestalt psychology
  - b. Wilhelm Wundt: set up the first psychological laboratory.
    - i. trained subjects in **introspection**: examine your own cognitive processing- known as **structuralism**
    - ii. study the role of consciousness; changes from philosophy to a science
    - ii. Also used by Edward Titchener
  - c. William James: published first psychology textbook; examined how the structures identified by Wundt function in our lives- **functionalism**
    - i. Based off of Darwin's theory of evolution
4. What are the different approaches to studying behavior and mental processes?
  - a. biological, evolutionary, psychoanalysis (Freud), behavioral (Watson, Ivan Pavlov, B.F. Skinner), cognitive, humanistic (Abraham Maslow, Carl Rogers), social (Bandura) and Gestalt
5. Who are the individuals associated with different approaches to psychology?
  - a. Darwin, Freud, Watson, Skinner and Maslow
6. What are each of the subfields within psychology?
  - a. cognitive, biological, personality, developmental, quantitative, clinical, counseling, psychiatry, community, educational, school, social, industrial

### Methods and Testing

1. What are the two main forms of research?
  - a. **Applied research**: compare two different methods; has clear, practical applications
  - b. **Basic research**: explores questions that are of interest to psychologists but are not intended to have immediate, real world applications
2. What are some major terms associated with data collection and experimentation?
  - a. Validity
    - **face validity**: refers to a superficial measure of accuracy
    - **content validity**: a type of face validity; how well a measure reflects the entire range of material it is supposed to be testing
    - **criterion related validity**: can have two types
      - **concurrent validity**: how much of a characteristic a person has now
      - **predictive validity**: a measure of future performance
    - **construct validity**: most meaningful; if a measure already exists and has been established to identify validity, can correlate performance on the new measure with other performances. The higher the correlation, the more construct validity the new measure has
  - b. Reliability
    - **split half**: randomly dividing a test into two different sections and then correlating people's performances on the two halves.
    - **equivalent- form**: the correlation between performance on the different forms of the test
    - **test-retest**: refers to the correlation between a person's score on one administration of the test with the same person's score on a subsequent administration of the test
    - Use **operational definitions** to define procedures, variables, etc.- use so that other people can replicate your same research design (**reliability**)

- c. Hypothesis
  - d. Theory
3. What are the different research designs to studying behavior and mental processes?
    - a. laboratory experiments vs. field experiments
    - b. naturalistic observation, surveys, case studies and experiments
    - c. standardized testing- ex. SAT test;
    - d. can create either a **longitudinal** or **cross-sectional** study
  4. What are the different variables in an experiment?
    - a. the variables affect the outcome of the experiment
    - b. independent vs. dependent
    - c. experimental vs. control group
      - i. **Hawthorne effect**: it has been proven that merely selecting a group of people on who to experiment has been determined to affect the performance of that group, regardless of what is done to those individuals
      - ii. can use **counterbalancing** – use subjects as own control group or to eliminate order effects (doing better on a task the second time)
  5. What are the flaws inherent in experimental research designs?
    - a. there may be variables that confuse the results of an experiment including the
      - confounding variable
      - random variable
      - placebo
      - experimental bias
    - b. assignment is the process by which subjects are put into a group, experimental or control
      - i. random assignment means that each subject has an equal chance of being placed into any group
    - c. **Double blind design**- participant is uninformed (blind) to the purpose of the experiment AND the individual collecting the data is “blind” to which group they are collecting from (control or experimental); use to help avoid experimenter bias
  6. What is the purpose and importance of sampling in an experiment?
    - a. a **sample** is an important component in research in order to generalize and apply results to a larger population
      - i. must first identify the population from which the sample will be selected.
      - ii. goal of sample selection is to ensure representative of that population
    - b. types of samples
      - i. **random selection**: increases the likelihood that the sample represents the population
      - ii. **stratified sampling**: ensures that the sample represents the population on some criteria
    - c. looking to prove **correlation**: relationship between two variables without assuming cause
      - i. between -1 and +1 for a perfect correlation
      - ii. 0 means no correlation between variables
  7. What are the different descriptive statistics that accompany experimental data?
    - a. in order to summarize and analyze data, researchers use descriptive statistics including
      - mean
      - median
      - mode
    - b. create a frequency distribution with the measure of central tendency marking the center of the distribution; can be distorted by extreme scores, **outliers**
    - c. if distribution is not symmetrical, it is skewed
      - i. positively skewed: when outlier is very high (more low scores than high scores)
      - ii. negatively skewed: when outlier is low (more high scores than low scores)
    - d. measures of variability- look at the **range** of scores (difference between the highest and lowest scores in the distribution)
      - ex. **variance**- the average squared deviation of each number from its mean
      - standard deviation**- the square root of the variance
        - i. **z-score**: measure the distance of a score from the mean. negative if

- below the mean; positive z-score if above the mean
- e. **Statistically significant:** how likely it is that the results occurred by chance
  - when the averages are reliable and the difference between them is relatively large
  - the difference observed is probably not due to chance
  - indicates the likelihood that a result will happen, not the importance of it
- 8. What are inferential statistics?
  - a. purpose is to determine whether or not findings can be applied to the larger population from which the sample was selected
  - b. the extent to which the sample differs from the population is known as **sampling error**
- 9. What ethical responsibilities do psychologists have?
  - a. Animal Research
    - how do different species learn, think and behave; can compare/contrast findings to people
    - must have a clear scientific purpose
    - must care for and treat animals in a humane way
    - must acquire animals legally
    - design experimental procedures that employ the least amount of suffering possible
  - b. Human Research
    - voluntary participation
    - Obtain informed consent- know involved in research
    - Protect them from harm and discomfort/ no significant mental or physical risk
    - Treat info confidentially
    - Fully explain the research afterward/ debriefing procedures
    - Proposals must go thru an ethics committee before proceeding
- 10. What standards of accountability to psychologists have?
  - a. accountability in research is possible if research is held to standards of reliability and validity
  - b. Have to ensure that experiment results are both valid and reliable
  - c. informed consent, participants must be voluntary, confidentiality/anonymity, low risk, debriefing at conclusion of experiment

## Biology and Behavior

1. How do messages travel from one neuron to another?
  - a. messages travel from dendrites through the cell body and down the axon to the axon terminals.
    - i. myelin sheath protects and increases action potential
  - b. the message is sent across the synapse by means of neurotransmitters to the dendrites of the next neuron.
    - i. examples of **neurotransmitters**: dopamine (alertness), endorphins (pain relief), serotonin (mood)
2. Identify the systems that make up the peripheral nervous system.
  - a. The somatic nervous system (which transmits sensory messages with muscles) and the autonomic nervous system (which regulates the body's vital functions). The autonomic nervous system is made up of the sympathetic and the parasympathetic nervous system.
3. In what way do parasympathetic and the sympathetic nervous systems work together?
  - a. Although the two systems have opposing functions, they actually work together. The sympathetic prepares the body to confront a stressful situation. The parasympathetic system restores the body's function to normal levels. Our bodies are unable to function at aroused levels for long periods of time.
4. Why is the cerebral cortex important?
  - a. it is the part of the brain that controls the way we think as well as our memory, language, emotions, associations, perceptions and complex motor functions
  - b. divided into lobes- frontal, parietal, occipital and temporal
  - c. Within these lobes are specific "CORTEX" that provide a specific function
    - a. **motor cortex**: back of the frontal lobe running from ear to ear; causes movements in specific body parts
    - b. **sensory cortex**: receives info from skin senses and the movement of body parts; parallel to the motor cortex and just at the front of the parietal lobes
    - c. **association areas**: pretty much the rest of the cortex; integrate information from incoming sensory info with stored memories
  - d. Can also see some impairment with language if cortex areas damaged: **aphasia**

- could speak, but not read or write (any combination)
  - **Broca's** area: left frontal lobe: can comprehend language, but not find own words; associated with the muscles used to help form speech
  - **Wernicke's** area: left temporal lobe; speak meaningless words
5. Describe two differences between the left hemisphere and the right hemisphere of the cerebral cortex.
- a. the left hemisphere is usually more involved in language and logic, while the right hemisphere plays more of a role in emotions, creativity and spatial relations.
6. What are the three main sections of the brain?

- hindbrain, midbrain, forebrain

-The **HINDBRAIN**: where incoming signals first reach; vital autonomic signals (heartbeat, breathing, blood pressure)

- 1) The **brainstem**: starts where the spinal cord enters the skull; where most nerves from both sides of the brain connect to other side of the body
- 2) the **medulla**: where the brainstem swells slightly; controls heartbeat and breathing
- 3) **pons**: just above the medulla: coordinates movements (like facial expressions)
- 4) **reticular formation**: just inside the brainstem (split b/t hind and midbrain); network of neurons that extends from the spinal cord to the thalamus; filters info and relays important info to other areas of the brain; involved in arousal (damage could lead to coma)
- 5) **Cerebellum**: "little brain"/ baseball sized; some nonverbal learning and memory (think body language); fine, voluntary motor movements like reading music

- The **MIDBRAIN**

- in between spinal cord and forebrain; simple movements (like eyes), home of the reticular formation

- The **FOREBRAIN**- extremely complex; AKA "**limbic system**": b/c all deal with emotion/memory

- 1) **thalamus**: received info from all senses except smell and routes it to the brain regions that deal with that sense; like the "hub" or "switchboard"; also receives some higher level info from cerebellum and medulla; pain and touch from the spine
- 2) **Hypothalamus**- hunger, thirst, sex drives, body temperature; controls the pituitary gland; serves as a sort of "reward center" essential to survival; control biological rhythms
- 3) **Amygdala**- lima bean shaped; emotions tied to memory (especially aggression and fear); the perception and processing of emotional memories
- 4) **Hippocampus**- process new memories (but don't store); shrinks as we age

7. List the different imaging techniques used to study the brain.

- a. EEG, CAT scan, the MRI/ fMRI and PET scan

8. Why do you think it benefits people to have brains that are flexible? What would happen if brains were not flexible?

- a. Because the brain is flexible, if one part is injured, another part may be able to assume the functions of the damaged part. If the brain were not flexible, then abilities controlled by the damaged part would be completely and forever lost. - **brain plasticity**

9. List and describe the role of hormones produced by the pituitary gland, the thyroid gland, the adrenal glands and the testes and ovaries.

- a. part of the endocrine system; travel through bloodstream; send messages between glands

10. The Endocrine system: interconnected w/ the nervous system

- cells form special organs called **glands**

- they communicate with each other by secreting hormones: similar to neurotransmitters; put chemicals in bloodstream to carry throughout the body

- o can only influence **target organs**: cells capable of receiving them

- o travel **MUCH SLOWER** than neurotransmitters

- **pituitary gland**: regulates growth, water and salt metabolism, reproductive organs and controls the adrenal glands; controlled by the hypothalamus in the brain
- **adrenal glands**: regulate carbs, salt metabolism; prepares body for action (sympathetic)
- **thyroid gland**: controls metabolic rate
- **testes**: males- physical development, reproductive organs; **ovaries**: females

## Sensation

1. How do our senses convert incoming stimuli into neural impulses?
  - a. Process of **transduction**
  - b. **Cocktail party phenomenon**: when attention involuntarily switches across the room when you hear your name (were not paying attention to conversation, but heard your name)
2. Label a diagram of the parts of the eye and ear and explain the role of each part.
  - a. Know lens (accommodation), cornea, pupil, iris, retina, fovea, optic nerve and blind spot, rods, cones, bipolar cells, ganglion cells
  - b. Know the difference between the two theories of color
    - i. Opponent- process
    - ii. Triarchic theory
  - c. Know the parts of a wave and how it assists in hearing (amplitude, frequency, pitch, etc.)
    - i. pitch theories: **place theory**: the hair cells in the cochlea respond to different frequencies of sound based on where they are located in the cochlea; mostly higher tones
    - frequency theory**: explains hearing lower tones
    - Volley theory**: neural cells alternate firing in rapid succession, so firing at above 1000x/ second
  - d. Explain hearing problems
    - i. **conduction deafness**: problem with conducting sound thru ear to cochlea
    - ii. **nerve deafness**: occurs when hair cells in cochlea are damaged
3. Explain the operation of other sensory systems, such as taste and touch.
  - a. Taste is sensed through receptor neurons located on the tongue (papillae)
  - b. The four basic taste qualities are sweetness, sourness, saltiness and bitterness
  - c. Touch is a combination of pressure, temperature and pain. Our skin senses are vitally important to us.
    - **gate control theory**
  - d. smell based on chemicals; message processed via olfactory bulb
4. Explain our body position senses
  - a. **kinesthetic**: keeps track of position and orientation of specific body parts in relation to each other
  - b. **vestibular**: tells how body is oriented in space; sense of balance
5. Define the different thresholds needed to detect sensory information.
  - a. **absolute threshold**: The smallest amount of stimulus that can be sensed
  - b. **difference threshold**: AKA just noticeable difference; the amount of stimulus change needed in order to sense that change
  - c. **Weber's law**: used to compute the difference threshold. The more intense the stimulus, the more change will be needed for us to detect and vice versa
6. Describe a recent situation where you were so involved in something that you did not notice your surroundings. How does that experience relate to **signal-detection theory**?
  - a. Examples might include talking with friends and not hearing the background music because of being more concerned about what the friends were saying
  - b. Reading a book while eating and not noticing the taste of the food because of being more interesting in the story.
  - c. **Signal detection theory** explains the examples because motivation lessens the effect of the stimuli
    - i. based on **response criterion**: how motivated we are to detect certain stimuli and what we expect to perceive
    - ii. **selective attention**: our awareness can only focus on a limited aspect of all that we experience (only actually process a small portion of all the info we take in)
      - EX. **Cocktail party effect**- ability to attend to only one voice among many but will pick up on another voice if it speaks your name

## Perception

1. How do we use top-down and bottom-up processing? Figure and ground?
  - a. **top-down**: perceive by filling in gaps in what we sense; use background knowledge to fill in gaps
  - b. **bottom-up**: use the features of the object itself to build a complete perception. Start with the individual characteristics of the image and put all those characteristics together into our final perception. A very automatic process.
  - c. use concept of figure and ground to determine which type of processing to use.

2. Explain Gestalt concepts and principles,
  - a. Figure-ground: perception of figures against a background
  - b. Continuity: when people usually prefer to see smooth, continuous patterns, not disrupted ones
  - c. Similarity: people think of similar objects as belonging together.
  - d. Proximity: the nearness of lines
  - e. Closure: the tendency to perceive a complete or whole figure even when there are gaps in what your senses tell you.
3. Describe the binocular and monocular depth cues
  - a. Monocular cues need only one eye to be perceived.
    - Linear perspective*: can draw 2 lines and see them meet
    - Interposition*: if something is blocking your view, perceive it as closer
    - Relative size*: if we assume two objects are similar in size, we perceive the one that casts the smaller retinal image as farther away.
    - Relative clarity*: perceive hazy objects as further away
    - Texture Gradient*: gradual change from distinct textures to indistinct textures = greater distance; far away appear smaller and more densely packed
    - Relative height*: perceive objects higher in our field of vision as farther away; bottom is perceived as ground, and therefore closer; also contributes to why we think things are higher than they are wider (St. Louis arch).
    - Relative motion*: as we move, objects that are stationary also appear to move
    - Light and shadow*: dimmer objects seem
  - b. Both eyes are required to perceive binocular cues for depth.
  - c. Two binocular cues for depth are **retinal disparity** and **convergence**
4. Explain the use of constancy in depth perception.
  - a. **size constancy**: objects appear larger the closer they come; take distance into account
  - b. **shape constancy**: objects viewed from different angles produce different shapes
  - c. **brightness constancy**: perceive objects as being a constant color even as the light reflecting off the object changes
5. **perceptual set**: a mental predisposition that greatly influences what we perceive
  - Formed from **schemas**: what we have learned and organized from our experiences
  - **Context effects**: the environment that you are in may affect both your schemas and your perceptions
6. Motion Perception-
  - perceive shrinking objects as retreating and enlarging objects are approaching
  - large objects appear to move slower than smaller objects
  - **phi phenomenon**: an illusion of movement created when two or more adjacent lights blink on and off in quick succession (think disco ball; lighted word signs)
  - **looming**: when things coming closer to you it appears to be bigger, but is it really?!?!

## Consciousness

1. What is consciousness?
  - a. The mental experience that arises from sensation and perception
2. What is the difference between the unconscious and the subconscious?
  - a. The unconscious is where sexual and aggressive urges reside (according to Freud)
  - b. Most psychologists refer to the subconscious as the place where mental processing, outside conscious awareness, occurs.
3. What kinds of mental processes occur at each of the stages of consciousness?
  - a. The conscious level deals with events and mental processes you are aware of.
  - b. The preconscious level processes mental events easily accessed by the conscious
  - c. Subconscious level deals with mental processes outside awareness and difficult to access
  - d. Nonconsciousness processing is totally removed from conscious awareness
4. How are the stages of sleep determined?
  - a. There are several stages of sleep measurable with an electroencephalogram (EEG)
5. What are the features of each stage of sleep?
  - a. part of the **circadian rhythm**: 24- hour pattern

- Stage 0- sleep onset: individual is relaxed but awake; experience mild hallucinations; alpha waves
  - Stage 1- non REM sleep- lowered respirations, blood pressure and pulse and lower EEG waves
  - Stages 2 and 3- show variations of brain wave patterns; stage 2= sleep spindles. Stage 3- delta waves
  - Stage 4- determined by the appearance of a particular brain wave pattern; difficult to wake
6. What is REM sleep?
    - a. An additional stage of sleep called Rapid Eye Movement
    - b. Identified by EEG waves of an awake person with near paralysis muscle tone.
    - c. An individual's eye will move rapidly under the eyelid and sudden spasmic activity may occur, particularly in the hands and face
  7. What are the common sleep disorders?
    - a. Insomnia, narcolepsy, sleep apnea, sleepwalking (somnambulism), nightmares, night terrors, REM behavior disorder and Sudden Infant Death Syndrome (SIDS)
  8. What are the explanations for why people sleep and dream?
    - a. Sleep theories- sleep may have evolved for 4 reasons
      1. protects: in early days, were safer in a cave sleeping than trying to hunt in the dark
      2. recuperate, restore and repair: brain tissue, neural connections
      3. remembering: restore and rebuild the day's memories; promotes recall
      4. growth: pituitary gland releases a growth hormone- also explains why we grow more as babies and adolescents- b/c we tend to sleep more!!
    - b. Dream theories
      - i. Activation- synthesis theory (lucid dreaming)
      - ii. Problem- solving theory
      - iii. Freud's wish fulfillment- manifest vs. latent content
  9. What are the factors that determine an individual's susceptibility to hypnosis?
    - a. An individual with the potential to be hypnotized must have a willingness to be hypnotized, a better ability to focus attention and ignore distraction, has a more active imagination, a tendency to fantasize and a capacity for processing information quickly and easily.
    - b. Can be used to recover repressed memories (Psychodynamic/Psychoanalytic therapy)
      - **Age regression**: the ability to recover childhood experiences/ even ACT THE AGE!
      - **posthypnotic suggestion**: a suggestion made while subject is hypnotized to be carried out after the session
      - Pain relief: can be given suggestions to feel no pain, reduce fear of pain, no anesthesia
      - most people also experience **posthypnotic amnesia**: report forgetting events that occurred while they were hypnotized; usually happens if no posthypnotic suggestion
  10. Is hypnosis an altered state of consciousness?
    - a. There are three major theories that examine hypnosis as an altered state
      - i. State theory
      - ii. Role theory
      - iii. Dissociation theory
  11. What is psychopharmacology?
    - a. The study of psychoactive drugs
  12. How do psychoactive drugs affect the brain?
    - a. cross the blood-brain barrier
    - b. Categorized as either agonists or antagonists, affect the brain through negative interactions with neurotransmitters
  13. What is a psychological dependence? Physical dependence?
    - a. Psychological dependence occurs when an individual uses a drug, despite adverse effects, in order to achieve a state of well being. The individual will become preoccupied by the drug.
    - b. Physical dependence (addiction) occurs when an individual must continue taking a drug to prevent withdrawal.
  14. What are the different categories of psychoactive drugs?
    - a. Depressants- alcohol, barbiturates, anxiolytics

- b. Stimulants- caffeine, cocaine, amphetamines, nicotine
- c. Opiates- morphine, heroin, methadone, codeine
- d. Hallucinogens (psychedelics) - LSD, peyote, mushrooms, marijuana

## Learning

1. Describe Pavlov's classic experiment with dogs. (Classical Conditioning)
  - a. Pavlov noticed that dogs salivated (UCR) to various stimuli associated with meat (UCS). He then paired the ringing bell with the giving of the meat. After several repetitions, Pavlov found that the dogs salivated (CR) to the sound of the bell.
2. Explain what is meant by
  - a. **Extinction**: occurs when CS is disconnected from the US and no longer causes the CR to occur
  - b. **Spontaneous recovery**: reappearance of an extinguished response
  - c. **Generalization**: responding the same way to similar but not identical stimuli
  - d. **Discrimination**: responding differently to stimuli that are not similar
3. Explain the Little Albert Experiment
  - a. John Watson and Rosalie Rayner conditioned a little boy named Albert to fear a white rat.
  - b. Loud noise (US) elicits natural response of fear (UR).
  - c. white rat (originally NS) becomes the CS and the CR is crying.
  - d. known as **aversive conditioning** because Albert conditioned to have negative response
4. Explain the differences between classical conditioning and operant conditioning.
  - a. **Classical**- learning is involuntary and automatic
  - b. **Operant**- learn through your own action
5. Explain the role of Edward Thorndike in learning.
  - a. conducted experiments using a cat in a puzzle box. Watched how cat learned to get out of the cage in order to get food (reinforcer)
  - b. the time required for the cat to get out of the box decreased over a series of trials
  - c. **law of effect**: if the consequences of a behavior are pleasant, the stimulus-response connection will be strengthened and the likelihood of the behavior will increase. The reverse is also true.
  - d. coined his findings as **instrumental learning** because Thorndike believed that learning consequences is instrumental in shaping future behaviors.
6. Describe B.F. Skinner's role in operant conditioning
  - a. coined the term operant conditioning
  - b. invented the Skinner box to use in his research
  - c. use food as a reinforcer
7. Name the types of reinforcers
  - a. Primary, secondary
  - b. Positive, negative
  - c. punishment
8. Describe how punishment impacts learning
  - a. escape learning
  - b. avoidance learning
9. How are fixed schedules of reinforcement different from variable schedules?
  - a. Fixed ratio- the reward is given after a fixed number of responses
  - b. Fixed interval- reward is given after a fixed amount of time has passed
  - c. In the variable schedules, both the ratio and interval may vary
10. Describe other examples of learning by
  - a. **observational**: The Bandura BoBo doll study: illustrated that children learn by watching others who display aggression (modeling)
  - b. Wolfgang Kohler's study of **insight**: chimpanzee's use insight to reach the banana
  - c. **Latent learning** (Edward Tolman): learning becomes obvious only once reinforcement is given for demonstrating it

## Memory and Language

1. What parts of the brain are involved in memory?
  - a. Hippocampus, cerebral cortex, cerebellum and the thalamus



2. How does the brain form memories?
  - a. Neural activity, specifically the neurotransmitters, as well as the synaptic activity, aid in the formation of memories
  - b. Three box/ information processing model
3. Why is encoding important to memory formation?
  - a. It is by this process that information is transformed into a code that our memory system can accept and use
  - b. effortful processing vs. maintenance rehearsal
4. What are the different purposes of the encoding process?
  - a. Acoustic codes- sounds into memory
  - b. Visual codes- represent information as pictures
  - c. Semantic codes- form information into a general meaning and experience
5. What are the purposes and functions of each type of memory?
  - a. Episodic memories- memories of an event stored as episodes
  - b. Semantic memories- generalized storage of knowledge
  - c. Procedural memories- knowledge and information about how a task is completed
  - d. Explicit memories- conscious memories of facts or events we actively try to remember
  - e. Implicit memories- unintentional memories that we might not even realize we have
  - f. Flashbulb memories- clear memory of an emotionally significant moment or event
6. What are the three different systems in which memories may be stored?
  - a. Sensory memory, short term memory or long term memory
7. How does encoding play a role in each memory system?
  - a. Sensory information is encoded by the sensory registers and stored in sensory memory for less than one second.
  - b. Encoding in STM, or working memory, seems to be dominated by acoustic encoding
    - maximum of seven items; 10-30 seconds of storage
    - serial position effect
  - c. Semantic encoding processes info into LTM
8. How can brain damage affect memory?
  - a. Brain damage can affect memory systems
  - b. Retrograde amnesia
  - c. Anterograde amnesia
9. What are the theories about how the brain stores and retrieves information?
  - a. Information processing model
  - b. Levels of processing model- examine how deeply a memory was processed
    - elaborative rehearsal
    - maintenance rehearsal
10. What are distinguishing characteristics of each of the models of memory?
  - a. Information processing model- suggests that info passes through three stages of mental processing: sensory memory, STM, LTM
  - b. Levels of processing model- memories depend on the effectiveness of the encoding process
11. How does the brain retrieve info from LTM?
  - a. Retrieval cues are related to the method of encoding the info to memory- recognition vs. recall
  - b. primacy vs. recency effect
  - c. semantic network theory
12. How does dependency effect retrieval?
  - **priming**: the activation of particular associations in memory
  - a. Context dependency- relationship with the context in which the info was encoded into memory
  - b. State dependency- context in which retrieval occurs
    - mood congruency
13. What is the theory of retrieval from semantic memory?
  - a. Spreading activation- the structure of memory is a network
  - b. recall vs. recognition
14. What are the characteristics of constructive memory?

- a. memories created/constructed based off of false memories
  - b. feel like accurate memories to the person recalling them
  - c. **misinformation effect**: incorporating misleading information into one's memory of an event
  - d. source amnesia: attributing to the wrong source an event we experienced, read about or imagined
15. Why do we forget?
- a. encoding failure
  - b. storage decay
  - c. retrieval failure
    - Interference
      - 1. proactive- old info interferes with learning new info
      - 2. retroactive- learning new info interferes with previously learned info
16. What are the mental strategies that can improve memory retention and memory retrieval?
- a. Mnemonics, or strategies for organizing in order to remember it
  - b. SQ3R- may aid in the retention of textbook material
  - c. chunking- group large list of items into smaller, more manageable groups

### Thinking (cognition) and Language

1. How do we describe thought?
  - a. **concepts**: similar to schemas; cognitive rules we apply to stimuli that allow us to categorize
  - b. **prototypes**: what we base concepts on; what we think is the most typical example of a concept
  - c. **images**: mental pictures we create in our minds of the outside world
2. What are the thought processes involved in problem solving?
  - a. **algorithms**: a rule that guarantees the right solution by using a formula or other foolproof method.  
Ex. know the numbers used, but not the pin number, so try every combo
  - b. **heuristics**: a "rule of thumb"; generally, but not always true that we use to make a judgment
    - i. Availability: based on examples of similar situations
    - ii. representativeness: based on how similar the aspects are to prototypes the person holds
3. What are the obstacles to problem solving?
  - a. **mental sets**: rigidity; the tendency to fall into established thought patterns  
ex. functional fixedness: inability to see a new use for an object
  - b. **confirmation bias**: tend to look for evidence that confirms our beliefs and ignore evidence that contradicts what we think is true
  - c. **framing**: the way a problem is presented; will influence how we perceive the problem
  - d. **overconfidence**: the tendency to overestimate the accuracy of our knowledge and judgments
  - e. **belief bias**: the tendency for one's preexisting beliefs to distort logical reasoning, sometimes by making invalid conclusions seem valid, or valid conclusions seem invalid
  - f. **belief perseverance**: clinging to one's initial conception after the basis on which they were formed has been discredited
4. How does the brain represent info in order to process thoughts?
  - a. Cognitive maps- take info and mentally represent it as routes and destination
  - b. Images- info that can be examined and synthesized
  - c. Concept schemas- generalizations based on experience which work to create expectations
  - d. Event scripts- provide anticipation or interpretation of an event
5. Is creativity a thought process?
  - a. Yes because individuals can demonstrate **divergent** thinking (developing novel yet effective solutions to a problem; look for multiple answers) instead of always using **convergent** thinking (thinking pointed toward one solution)
  - b. 5 components
    - 1) expertise- well developed base of knowledge
    - 2) imaginative thinking skills- make connections, patterns, connect ideas
    - 3) a venturesome personality- willing to persist/ experience new things
    - 4) intrinsic motivation- do things for YOU
    - 5) a creative environment-

6. What are the elements of language?
  - a. **Phonemes**- smallest unit of sound used in language; @ 44 in English language
  - b. **Morphemes**- smallest unit of meaningful sound ex. prefixes
  - c. spoken and written in a particular order: **syntax**
  - d. **semantics**: the set of rules we use to derive meaning from morphemes, word and sentences
2. What is language acquisition?
  - a. How we acquire language
    1. babbling – learning what sounds we can make
    2. telegraphic stages- combine words into simple commands; lack of complete syntax
3. How do theorists describe language acquisition?
  - a. Behaviorists- learned through operant conditioning and shaping (associations)
  - b. Cognitive- learned without explicit instruction by parents; have an inborn ability to learn; born with a language acquisition device
4. How do thought and language intertwine?
  - a. **linguistic determinism**: Whorf hypothesis: language determines the way that we think

## Intelligence

1. How do psychologists explain the nature of intelligence?
  - hard to define; more of a socially constructed concept than a “thing”
  - Ability to learn from experience, solve problems and use knowledge to adapt to new situations
  - most often referred to as our IQ (intelligence quotient)
2. What is the difference between fluid and crystallized intelligence?
  - a. fluid intelligence is our ability to solve abstract problems and pick up new information. Crystallized intelligence is when we apply that fluid intelligence
  - b. Raymond Cattell- the two types of g
3. List and describe the following theories of intelligence:
  - **Factor analysis**: a statistical procedure that identifies clusters of related items (factors) on a test
    - Used to identify different dimensions of performance that underlie a total score
  - a. Spearman- “g factor” vs. “s factor”
  - b. Gardner- multiple intelligences
  - c. Goleman- emotional intelligence
  - d. Sternberg- Triarchic theory
  - e. Thurstone- 7 primary mental abilities
4. Why did IQ tests develop?
  - a. Alfred Binet, a French psychologist, was commissioned to identify and provide special education programs to low achieving students.
  - b. His testing instrument evolved into a test to measure mental abilities (**mental age**)
5. How has the process of measuring intelligence changed since Binet’s work?
  - a. An American version of Binet’s test, called the Stanford-Binet test, expanded to measure adult intelligence
  - b. Wechsler- improved on the Binet and Stanford- Binet; added both verbal and performance scale
6. How credible are IQ tests in measuring intelligence?
  - a. The test must be reliable- results must be repeatable
  - b. Must be valid- measures what it is supposed to
  - c. **Standardized**
    - The process of defining meaningful scores relative to a pretested group
    - Form a normal distribution: a bell shaped pattern that forms the normal curve
      - Clusters around the mean
    - Keep restandardizing tests in order to keep the average around 100
      - **Flynn effect**: worldwide phenomenon that indicates the average person’s IQ is rising
7. What are some other tests use to assess intelligence?
  - Aptitude**- measure ability or potential (IQ test); predict ability to learn a new skill
  - Achievement**- measure/reflect what one has learned or accomplished (tests you take in school)

**speed tests**- large number of questions to complete in a short period of time; goal is to see how quickly a person can solve a problem

**power test**- goal is to gauge the difficulty level of problems an individual can solve. Test consists of items of increasing difficulty levels. Given sufficient time to work thru as many problems as they can since the goal is to determine the ceiling difficulty level, not their problem-solving speed

**group test**- administered to a large number of people at a time. Interaction b/t examiner and the people taking the test are minimal. Instructions provided to the group, then people given a certain amount of time to complete the sections of the test. Less expensive and are thought to be more objective than individual tests

**individual test**- involves greater interaction b/t the examiner and examinee. Ex Rorschach inkblot test

#### 8. What are some extremes of intelligence?

- **mental retardation**: a condition of limited mental ability
  - o IQ usually below 70
  - o Difficulty in adapting to the demands of life
    - Mild to profound
    - Down Syndrome: caused by an extra chromosome
- giftedness: tend to be well adjusted and unusually academically successful
  - poor and minorities less represented in this group

#### 9. Genetic and Environmental Influences on Intelligence

- Genetic Influences—the most genetically similar people have the most similar scores
- Heritability of intelligence- the extent to which variation in intelligence test scores in a group of people being studied is attributable to genetic factors (differences among people)
  - o Scores of identical twins reared together about the same as those of the same person taking the same test twice.
  - o A little less for fraternal twins
  - o Graph on page 455 shows correlations
  - o Adopted children tend to have similar intelligence to their biological parents
- Environmental Influences
  - o Studies of twins, family members and adopted children
  - o Fraternal twins raised together are more similar than those of other siblings
  - o Scores of identical twins raised apart are less similar than if raised together
- Group Differences in Intelligence Test Scores
  - o Whites tend to have average intelligence score about 8-15 points higher than Hispanic or African Americans
  - o Asians outperform north Americans on math and aptitude tests
  - o Gender
    - Girls are better spellers; more fluent and remember more words; locating objects; more sensitive to touch, taste and color; detect emotions; math computation
    - Boys outnumber girls in counts of underachievement; outperform girls in math problem solving

#### Motivation and Emotion

- **motivation**: feelings or ideas that cause us to act toward a goal

1. Compare and contrast the theories of motivation
  - a. **Instinct theory**- behavior patterns that are genetically transmitted from generation to generation are known as instincts; evolutionary advantages of persistent human behaviors
  - b. **Drive reduction theory**- behavior based on biological needs; goal is to reach homeostasis
    - i. primary drives: biological needs (ex. thirst)
    - ii. secondary drives: learned drives (ex. money)
  - c. **Incentive theory**- based on rewards/ punishment due to learning
  - d. **Arousal theory**- maintain optimal level of excitement/ arousal
2. Apply Maslow's theory to make predications about meeting needs
  - a. Maslow believed that people seek to satisfy basic survival needs before they seek to satisfy higher psychological needs.

- b. People rise naturally through the levels of this hierarchy as long as they do not encounter overwhelming obstacles along the way
  - c. physiological, safety, belongingness and love, esteem, self-actualization
- 3. What is the role of the hypothalamus in the hunger drive?
  - a. One part of the hypothalamus functions as a “start eating” center (lateral) and another as a “stop eating” (ventromedial)
  - b. also controls the metabolic rate
  - c. some people may be motivated by external factors – attractiveness/appeal, availability
  - d. others are internals, motivated internally- feeling hunger, stress eating
- 4. What is the relationship between heredity and obesity?
  - a. People with a certain genes may not be aware that they are eating too much
  - b. Genes also determine the number of fat cells a person has
- 5. What are some common eating disorders?
  - a. bulimia, anorexia nervosa, obesity
- 6. Explain the four stages of the sexual response cycle
  - a. Excitement
  - b. Plateau
  - c. Orgasm
  - d. resolution
- 7. What are some common myths associated with sexual orientation?
  - a. homosexuality is associated with a traumatic childhood event, parenting styles, parental orientation
  - b. may be a biological factor- size of brain structures, hormone levels in womb
- 8. Describe what motivates more complicated behaviors.
  - a. **achievement motivation**: our desire to master complex tasks and to reach personal goals
    - i. **intrinsic** motivation: rewards we get internally (enjoyment or satisfaction)
    - ii. **extrinsic** motivation: rewards that we get for accomplishments from outside ourselves
- 9. Identify the four types of motivational conflicts
  - a. Approach- approach
  - b. Approach- avoidance
  - c. Avoidance-avoidance
  - d. Multiple approach- avoidance
- 10. Identify the three theories of emotion, and describe how each one explains where emotions come from
  - a. James-Lange theory- emotions are the result of biological reactions from stress; physiological changes cause us to feel an emotion
  - b. Cannon-Bard theory- physical responses and cognitive activity occur simultaneously; thalamus responsible for the biological change and the cognitive awareness of emotions
  - c. Schacter’s Two Factor Theory- emotion depends on both biology and cognition (label the situation)
- 11. Know the difference between the two theories of stress
  - a. Seyle’s General Adaptation Syndrome- the general response humans/animals have to stress
    - i. alarm reaction
    - ii. resistance
    - iii. exhaustion
  - b. Holmes and Rahe
    - i. Social Readjustment Rating Scale (SRRS) based on LCU’s (life change units)
    - ii. instrument used to measure our stress levels

## Developmental Psychology

- study how our behaviors and thoughts change over our entire lives (conception to cremation)
- focus on the nature vs. nurture debate, continuity vs. stages and stability vs. change
- 1. Describe the role of genetics (nature) in developmental psychology
  - a. Prenatal development
    - **Zygote**: fertilized egg; separate and eventually differentiate (specialize)
    - Outer part attaches to uterine wall, forming the placenta; inner part called **embryo**
    - About 9 weeks- begin to look human: **fetus**

- Six months- organs formed; fetus responsive to sound
  - b. During the critical period, **teratogens** can cause harm to the fetus if ingested by the mother
    - ex. fetal alcohol syndrome, psychoactive drugs, chemicals
2. Define reflex and examples
    - a. An involuntary reaction or response
      - i. Swallowing, sucking, rooting (when touched on the cheek, will turn head to side), Babinski (fan their toes when the soles of their feet are touched) and Moro (startle) reflex
  3. Describe how newborns senses differ from adults.
    - a. Can hear before birth
    - b. Have same basic preferences in taste and smell (respond to sweet); preferences change with age
    - c. Sight is least dominant sense (born legally blind)
  4. Describe motor development in infants.
    - a. Roll over at 5 1/2 months, stand at 8-9 months, walk by themselves 15 months
    - b. **Maturation**: biological growth processes that enable orderly changes in behavior, relatively uninfluenced by experience
  5. Define the terms attachment and contact comfort
    - a. **Attachment**- emotional ties that form between people, especially infant and parent
    - b. **Contact comfort**- need to touch and be touched by something soft, such as skin or fun
  6. Describe Harry Harlow and Mary Ainsworth's experiments with attachment
    - a. Harlow- Study monkey's and their attachment to soft vs. food; go for comfort if feeling stressed or anxious
    - b. Ainsworth looked at human infant reactions in "strange situations"
      1. **secure attachment**- confident with parental presence, distress when alone, come to parents when they return; majority of participants in the study
      2. **avoidant attachments**- resist being held/ want to explore when parents presence, will not return to parents for comfort upon their return
      3. **anxious/ambivalent attachment**- may show stress when left alone but will resist being comforted when parents return
  7. What are the different parenting styles? (Diana Baumrind)
    - a. **authoritarian**: strict rules and punishments; punish more than reinforce
    - b. **permissive**: no clear guidelines; rules change and not constantly enforced
    - c. **authoritative**: set standards that are reasonable and explained; praise as often as punish
  8. Describe Sigmund Freud's **psychosexual** stages: if face conflict in a stage, will become fixated there
    - a. Oral stage (birth-1) mouth is the center of sexual pleasure
    - b. Anal stage (1-3) sexually gratified by the act of elimination
    - c. Phallic stage- (3-5) gratification moves to the genitalia; Oedipus and Elektra complex; penis envy and castration anxiety
    - d. Latency period (6-puberty) repress sexual feelings and focus on other skills
    - e. Genital stage (puberty thru adulthood) sexual pleasure thru sexual relationships with others
  9. Describe Erik Erikson's psychosocial stage theory
    - a. neo- Freudian who focused on identity formation
    - b. personality influenced by experiences/ social conflicts with others- **Psychosocial Stage Theory**
      - i. trust vs. mistrust- babies
      - ii. autonomy vs. shame and doubt- toddlers
      - iii. initiative vs. guilt-
      - iv. industry vs. inferiority- first grade
      - v. identity vs. role confusion- adolescence
      - vi. intimacy vs. isolation- young adults
      - vii. generativity vs. stagnation- mid life
      - viii. integrity vs. despair- end of life
  10. Identify and briefly describe Piaget's four stages of cognitive development
    - worked with Binet on the first intelligence test; noticed children of roughly the same age almost always gave similar wrong answers. Led him to study how we develop our thinking processes as we age.
    - a. **Sensory motor stage**- (birth-2) explore world thru senses; develop **schemas**; develop **object**

### **permanence**

- b. **Preoperational stage**-(2-7) use symbols to represent schemas; beginning of language; limited in the way we can form relationships between objects
  - c. **Concrete operational stage**- (8-12) more logical thinking/ form complex relationships between objects; **concepts of conservation**- properties of objects remain the same even when their shapes change
    - i. volume- conserved even if the material's container changes (ex. water in vase to bowl)
    - ii. area- conserved even if objects within the area are rearranged
    - iii. number- number of objects conserved when objects rearranged
  - d. **Formal operational stage**- (12-adulthood) people can think abstractly, hypothesize, metacognition
    - criticized because many believe he underestimated children- go thru stages faster than he thought.
11. Describe the three levels of moral development theorized by Kohlberg
- a. **Pre-conventional**,
  - b. **Conventional**
  - c. **post-conventional**
  - d. criticized for not sampling females/ not observing gender as a variable
  - e. Carol Gilligan tested girls and found they answered the Heinz question at lower levels than boys.
    - concluded that girls pay more attention to the situation and boys use a more absolute view

## **Personality**

1. How is personality defined?
  - a. An enduring set of psychological and behavioral characteristics that separate one individual from another
  - b. Unique attitudes, behaviors and emotions that characterize a person
    - i. Type A- feel a sense of time and pressure; easily angered
    - ii. Type B- more relaxed and easy going
2. What are the characteristics that make up an individual's personality?
  - a. Developmental experiences, biological make up, perceptual habits, emotional expressions and social skills
3. What are the principle concepts of Freud's Psychodynamic Approach?
  - a. Psychosexual stage theory (see in development section)
  - b. Freud believed that the **id**, **superego** and **ego**, struggling for dominance in an individual's unconscious, make up personality
    - i. **id: pleasure principle**/ immediate satisfaction; exists in the unconscious mind
    - ii. **ego: reality principle**/ negotiate between desires of the id and limitations of the environment; mediate between id and superego; exists in part conscious and partly unconscious
    - iii. **superego**: sense of conscience; operates on conscious and unconscious level;
4. What is the role of defense mechanisms in personality?
  - a. Include repression, regression, projection, reaction formation, compensation, denial, sublimation, displacement, rationalization
  - b. Ways of dealing with the unconscious urges and conflicts of the id and superego; protect conscious mind
5. What is neo-Freudian theory?
  - a. Individuals who agree with Freud's basic principles but disagree on the emphasis on sexual conflicts and urges as the foundation of personality
  - b. Alfred Adler- an "ego psychologist"; focused on the conscious role of the ego. Believed people are motivated by the fear of failure (inferiority) and the desire to achieve (superiority)
  - c. Erik Erikson- focus on social conflicts rather than sexual
  - d. Carl Jung- the unconscious consists of two different parts
    - i. **personal unconscious**: similar to Freud's unconscious (repressed memories)
    - ii. **collective unconscious**: passed down thru the species and explains similarities between cultures
  - e. Karen Horney- women do not have penis envy, men have **womb envy**

6. How does the Trait approach explain personality?
  - a. Suggests that there are stable, internal characteristics that make up an individual's personality
  - b. use **factor analysis**: use correlations between traits in order to see which traits cluster together as factors; if a strong correlation is found between traits, one could argue that these traits represent a common factor that we can call personality
7. What are the various theories of the Trait Approach? How are they assessed?
  - a. Allport's Trait theory- identify central and secondary traits that form personality
    - **cardinal disposition**: one trait that plays a role in everything a person does
    - **central vs. secondary traits**: some traits have a bigger influence
  - b. Cattell's Factor Analysis- correlation among similar traits that form a dimension of personality; all people have the same 16 traits, just at different levels
  - c. Eysenck's Biological Trait Theory- characterized personality based on introversion/extroversion or stable/ unstable
  - d. "Big Five" model- defines personality in five dimension categories (extraversion, agreeableness, conscientiousness, openness to experience and emotional stability)
  - e. any of these theorists used **personality inventories**: longer questionnaires covering a wide range of feelings and behaviors to assess several traits at once
    - most common is the **Minnesota Multiphasic personality Inventory (MMPI)**: assess abnormal tendencies, but a good way to use empirical evidence
8. How does the Behavioral approach explain personality development?
  - a. behavior is personality; determined by the environment
  - b. the way we are reinforced for our behaviors will determine our personalities
  - c. if reinforced in different ways, can alter our personalities
9. Who are the notable psychologists advocating the Social-Cognitive Approach
  - a. Julian Rotter-**locus of control**: can be internal or external
    - internal locus of control: feel that you are responsible for what happens to you
    - usually healthier, more politically active, do better in school
    - external locus of control: luck and external forces determine your destiny
  - b. Albert Bandura- **Reciprocal Determinism**- personality is created by an interaction between traits, the environment and the person's behavior. Each of these factors influence both of the others
    - also believed that self-efficacy will influence personality. People with a higher level will do more to make themselves feel accomplished
  - c. George Kelly- **personal construct theory**- in people's attempts to understand the world, they develop their own individual systems of constructs. These are pairs of opposites (fair/unfair, exciting/dull) are used to evaluate the world.
10. What are the main points of the biological approach?
  - a. view genes, chemicals and body types as the determinant of personality
  - b. genetics play a role in **temperament**: emotional style and characteristics that define how a person deals with the world
  - c. *William Sheldon*: somatotype theory. There are three body types: fat, muscular and thin. Certain traits are associated with each body type
    - o Not very accepted- may be a correlation, but not a biological cause
    - o fat- friendly, outgoing
    - o Muscular- aggressive
    - o thin- shy, secretive
11. Describe the humanistic approach to personality.
  - a. view people as innately good and able to determine their own destinies through the exercise of free will
  - b. stress the importance of a person's **self- concept** (a person's global feeling about themselves; developed thru their involvement with others, how you think they view you and self-esteem)
  - c. Abraham Maslow- hierarchy in which self- actualization is the ultimate goal; Studied productive people and found they all shared the same characteristics—self-awareness, self-accepting, open and spontaneous, loving and caring, not paralyzed by others' opinions. Very secure in their sense of who they were. Focus on one task—your mission in life; enjoy deep relationships



- d. Carl Rogers- self-theory- although people are innately good, they require certain things from their interactions with others, especially **unconditioned positive regard**: you will be loved no matter what
  - we must feel totally accepted in order to reach self-actualization
- 12. What is the difference between an objective and projective test of personality?
  - a. Objective- standardized, question and response, formatted test
    - i. Results can be quantified and analyzed
  - b. projective- advocated by supporters of the psychoanalytic personality theory and contains ambiguous stimuli
    - **Thematic Apperception Test (TAT)**: Henry Murray- view ambiguous pictures and then make up stories about them. Assess achievement motivation
    - **Rorschach inkblot test**: assumes that what we see in its 10 inkblots reflect our inner feelings and conflicts; good for finding aggression issues
    - not necessarily the most valid or reliable tests

### Abnormal Behavior and Treatment

1. What is abnormal psychology?
  - a. The study of those who suffer from psychological disorders
  - b. Abnormal- harmful or disturbing to the individual or others; unusual; irrational
2. Identify three problems with defining normal behavior as the behavior displayed by the majority of the people.
  - a. The behavior of the majority is not always wise or healthy
  - b. Some atypical behaviors are eccentric rather than indicative of a disorder
  - c. People with psychological disorders usually do not differ much from people who are “normal”
3. How have the criteria for the classification of psychological disorders changed since 1980? Why did they change?
  - a. The criteria have changed from presumed causes to observable signs and symptoms
4. Give an example of a feeling or a behavior that would be considered normal in one circumstance but might be considered a sign of a psychological disorder in another circumstance.
  - a. Feelings of grief would be a normal response to the death of a friend but an abnormal reaction to getting a pimple
5. Explain selected categories from the DSM-IV of abnormal behavior, such as anxiety disorders, mood disorders, substance abuse disorders and schizophrenia
  - a. Anxiety disorders: panic disorder, social phobias specific phobias, generalized anxiety disorder, OCD, post traumatic stress disorder
    - caused by: psychoanalytic- unconscious conflicts between id, ego and superego
    - behaviorists- learned fear/anxiety
    - cognitive- unhealthy/irrational ways of thinking
  - b. Mood (affective) disorders: experience extreme or inappropriate emotions; major depression, seasonal affective disorder, bipolar disorder (formerly known as manic depression)
    - caused by: psychoanalytic- anger directed inward
    - behaviorist- brings reinforcement (attention, sympathy); **learned helplessness**
    - biological- low levels of serotonin
    - cognitive- negative ideas that people have about themselves, their world and their futures (Aaron Beck; **cognitive triad**)
  - c. Schizophrenia: one of the most severe and debilitating; disordered, distorted thinking often demonstrated thru delusions and/or hallucinations; may have **positive** or **negative symptoms**
    - paranoid: delusions of persecution
    - catatonic: odd movements, move jerkily, remain motionless in strange postures, **waxy flexibility; flat affect**
    - disorganized: odd uses of language- **neologisms**, clang associations, flat or inappropriate effect with emotions
    - undifferentiated: disorganized thinking
    - causes: biological-**dopamine hypothesis**: high levels of dopamine are associated with

schizophrenia- have found that people with Parkinson's that are given dopamine tend to experience schizophrenic like distortions in thought; brain asymmetries, genetic predisposition

cognitive-behavior: experience **double binds**

- d. Somatoform: person manifests a psychological disorder through a physiological symptom in the absence of any physical cause; hypochondriasis, conversion disorder
    - caused by: psychoanalytic- unconscious conflicts
    - behaviorists- reinforced for their behavior (receive more attention)
  - e. Dissociative: disruptions in conscious processes; psychogenic amnesia, dissociative identity disorder (multiple personalities)
    - psychogenic amnesia: amnesia with no biological reasoning
    - caused by: psychoanalytic-repression of extremely traumatic event
    - behaviorist- learned that not thinking about the event is rewarding
  - f. Personality: generally less serious; maladaptive ways of behaving that negatively affect people's ability to function; antisocial, dependant, narcissistic, histrionic (overly dramatic), obsessive compulsive personality disorder
  - g. Other- paraphilias, eating disorders, substance abuse/alcoholism, sadists, masochist, ADHD, autism
6. Describe the Rosenhan Study
- a. Study the influence of labeling psychological disorders
  - b. seeks admission to mental hospitals by claiming to be hearing voices.
  - c. once admitted, stopped reporting hearing voices and continued "normal" behavior
  - d. none were exposed as imposters; all left with diagnosis of schizophrenia in remission
  - e. raises several important issues:
    - 1) Should people who were once diagnosed with a psychological problem carry that diagnosis for the rest of their lives?
    - 2) To what extent are disorders the product of a particular environment and the what extent do they inhere in the individual
    - 3) What is the level of institutional care available if the imposters could go undetected for a period of days or weeks?
7. Describe the early history of mental illness treatments.
- a. early societies and Middle Age- mental illness a sign of evil spirits;
    - drill hole in skull to "release"-**trephining**; more persecution than actual treatment
  - b. Greece- believed illnesses influenced by biological factors and could be treated
  - c. Enlightenment- more sympathetic view/ humane treatment
    - Dorothea Dix in U.S. creates mental hospitals so patients not treated like criminals
  - d. **deinstitutionalization**: release patients in order to save money; many people unable to care for themselves;
  - e. new focus on **preventative efforts**: treat before illness becomes severe; reduce suffering and costs
    - **primary prevention**: reduce societal problems (homelessness/ unemployment)
    - **secondary prevention**: working with people at risk for developing illnesses
    - **tertiary prevention**: keep people's mental health issues from becoming more severe
8. Identify major treatment orientations used in therapy, such as behavioral, cognitive, psychoanalytic, humanistic and biomedical
- a. Behavioral Therapy: to eliminate undesirable learned behaviors
    - **counterconditioning**: classical conditioning to replace a conditioned unpleasant response with a pleasant one
    - Exposure therapy
      - may use **systematic desensitization**: teaching the client to replace the feelings of anxiety with relaxation. Then construct an anxiety hierarchy, ranking fears in order from least frightening to the most frightening; very gradual process
      - start at the bottom and learn to relax with those less frightening, and work way up
    - **aversive conditioning**: pair a habit a person wishes to break with an unpleasant stimulus
  - b. Cognitive- to change unhealthy thought processes; difficult because clients irrational and combative; many have an unhealthy and negative **attributional style**- believe they are responsible for all that is wrong/ failures

- **Rational Emotive Behavior Therapy (REBT)**: Albert Ellis- look to expose and confront the dysfunctional thoughts of their clients. Goal is to show the client that not only is their failure unlikely, but if it did occur, it really wouldn't be that big of a deal
- **Cognitive Triad**: Aaron Beck: alleviate depression while identifying and challenging the irrational ideas that cause their unhappiness- negative beliefs about self, the world and future
- c. Psychoanalytic- Freud; to reduce anxiety and guilt over unconscious urges; usually lie on couch
  - avoid **symptom substitution**: when, after a person is successfully treated for one disorder, they begin to experience a new psychological disorder
  - use hypnosis to find the repressed thoughts
  - **free association**: say whatever comes to mind without thinking; keep us from censoring what we say; reveal clues about what is really bothering us by avoiding the ego's defenses
  - dream analysis and interpretations
    - **manifest content**: what patients can reports from the dream
    - **latent content**: what is really of interest to the analyst/ revealed only thru therapy
  - when patients disagree with the interpretations, may show signs of **resistance**
  - **transference**: when in the course of therapy, patients begin to have strong feelings toward their therapists; love, hatred- way of redirecting emotions from self
- d. Humanistic- to help clients realize their full potential (self- actualization); people have free will and can determine their own destinies
  - Carl Rogers: **client centered therapy/ person centered therapy**: therapist provides client with **unconditional positive regard**: blanket acceptance and support of a person regardless of what the person says or does. Help patient to accept and take responsibility for them
  - let the patient control the session/ bring up topics (non-directive of therapist); therapist says very little but participates in **active listening**
  - Gestalt therapy: emphasize importance of the whole; integrate all actions, feelings and thoughts into a total experience
  - **Existential therapy**: focus on helping clients achieve a meaningful perception of their lives; see life as worthwhile
- e. Somatic- therapy that produces bodily changes
  - **psychopharmacology/ chemotherapy**: drugs to treat problems
    - schizophrenia: antipsychotics: *Thorazine, Haldol*- antagonists that block dopamine receptor sites. May result in **tardive dyskinesia** (muscle tremors)
    - mood disorders: antidepressants, serotonin (*Prozac*), *Lithium*
    - anxiety: anxiolytics or barbiturates- ex. *Xanax, Valium*
  - **Electroconvulsive therapy**: (ECT) electric current sent thru both hemispheres (bilateral) or one hemisphere (unilateral) causing patient to briefly lose their memory, changing blood flow and possibly the role of hormones (rarely used; depression)
    - rarest therapy is **psychosurgery**: purposeful destruction of part of the brain to alter a person's behavior. Used as a last resort and only for those truly suffering
    - ex. **prefrontal lobotomy**: cut main neurons to frontal lobe to calm patient- could lead to a vegetative state
- f. Group therapy- ex. AA groups, self- help, family therapy; reveal patterns, find support system
- g. Psychodynamic- still look at role of unconscious, but use techniques from other approaches
  - **insight therapy**: highlight the importance of the patient gaining understanding of the problem
- 8. Differentiate the various types of intervention specialists; psychologist vs. counselor vs. social worker
  - a. Clinical psychologists work in hospitals and clinics; assist and treat people with psychological problems; earn PhD
  - b. Counselor- graduate degree; counsel people with everyday personal and family problems; treat those with less severe disorders than a clinical psychologist
  - c. Psychoanalyst: specifically trained in Freudian methods; may or may not hold medical degree
  - d. Psychiatrist- medical doctors; prescribe prescriptions; favor biomedical/ somatoform; less trained in psychotherapy

**Social Psychology** -study how we relate to others

- Social Cognition- how we form attitudes/ think about others and ourselves; as we go through our daily lives, we are constantly gathering data and making predictions about what will happen next so we know how to act

1. What are attitudes?
  - a. Beliefs and feeling about objects, people and events that lead people to behave in certain ways
    - are evaluative: our feelings are positive or negative
2. How do attitudes develop?
  - a. Through experience and learning through conditioning, observations, cognitive evaluation and the formation of cognitive anchors
  - b. **mere exposure effect**: the more one is exposed to something the more they will come to like it
    - we are attracted to the famous, experts, physically attractive
3. What is the relationship between attitudes and behavior?
  - a. **cognitive dissonance theory**: based on the idea that people are motivated to have consistent attitudes and behaviors. When they do not, they experience unpleasant mental tension (dissonance)
    - Ex. A person believes that lying is wrong and may feel so guilty and uncomfortable about telling the lie that they may come to believe that the lie is true
4. What are **compliance strategies**?
  - a. How to get others to comply with our wishes
    - i. Foot in the door phenomenon- get someone to agree to a small request, then ask for a bigger favor
    - ii. Door in face phenomenon- if they refuse a big request, will be more likely to complete a much smaller favor
    - iii. Norms of reciprocity- do something nice for me, I'll return the favor
5. Describe elements of the Attribution Theory
  - a. Explain how people determine the cause of what they observe
    - i. Can be based on a person, situation; stable or unstable
    - ii. attributions of people are based on:
      - consistency**: how similarly the person acts in similar situations over time
      - distinctiveness**: how similar this situation is to other situations we have watched
      - consensus**: consider how others in the same situation have responded
    - ii. **Self- fulfilling prophecy**- preconceived ideas/ expectations about others before we even meet them; can also apply to yourself
6. Define **fundamental attribution error**
  - a. The tendency to overestimate the effect of dispositional causes for another person's behavior and to underestimate the effects of situational causes
  - b. fundamental because so widespread
    - i. Less likely in collectivist than in individualist cultures
  - c. **false- consensus effect**: the tendency for people to overestimate the # of people agreeing w/ them
  - d. **self- serving bias**: tendency to take more credit for good outcomes than for bad ones; serve yourself by making you look as good as possible
7. Explain the difference between stereotype, prejudice and discrimination
  - a. **Stereotype**: positive or negative ideas we have about people in a specific group
  - b. **Prejudice**- undeserved, usually negative, attitude toward a group of people
    - Exaggerated differences between oneself and others
    - a. "us"= in group      "them"= outgroup
    - b. **ingroup bias**: our tendency to favor our own group
    - Scapegoat theory**: the theory that prejudice offers an outlet for anger by providing someone to blame
    - Just world phenomenon**: the tendency of people to believe the world is just and that people therefore get what they deserve and deserve what they get
      1. "blame the victim"
      2. hindsight bias
  - c. **Discrimination**- unfair treatment of people because they are members of a particular group (action)

8. Identify several causes of prejudice
  - a. Exaggerated differences between oneself and others
  - b. Assume others as inferior because they are of a different status
  - c. Learning through observation and reinforcement
9. Identify three ways people can help reduce prejudice in their communities
  - a. **contact theory**: contact between hostile groups will reduce animosity
    - reach a **superordinate** goal: goal that benefits all members of the group
  - b. Setting an example of tolerance for others
  - c. Working toward common goals in groups of people with mixed racial, gender or ethnic backgrounds
10. How does physical attractiveness influence one's choice of friendship and partners?
  - a. People tend to choose as friends and partners people who are about as attractive as they find themselves
11. Why are most people attracted to people who are similar to themselves?
  - a. They are the people with whom they are most likely to have frequent contact with
  - b. Similar backgrounds may lead to similar attitudes (reciprocal liking)
- o romantic love- Elaine Hatfield
  - o **passionate love**: an aroused state of intense positive absorption in another, usually present at the beginning of a love relationship
  - o **companionate love**: the deep affectionate attachment we feel for those with whom our lives are intertwined
12. Describe antisocial and prosocial behaviors
  - a. Antisocial/aggressive behaviors are usually hostile
    - i. **Frustration-aggression hypothesis**: the feeling of frustration makes aggression more likely
    - ii. Ex. Bandura's Bobo Doll Study
  - b. Prosocial behaviors make us more likely to help others
    - i. ex. bystander intervention: likelihood of helping someone else who is in trouble
13. Discuss the impact of society on individual behaviors
  - a. **Social facilitation**: the presence of others improves our task performance
  - b. **social impairment**: being watched by others hurts our performance
  - c. **conformity**: tendency of people to go along with the views or actions of others
14. What factors influence people to conform to social norms?
  - a. Presence of a collectivistic culture
  - b. Need to be liked and accepted by others
  - c. Unanimity of opinion in a group of up to eight members
15. What proof is available to show that people tend to conform to others?
  - a. Asch's studies- participants along with a group of others were asked to state their opinion about a known fact.
  - b. The experiment was "rigged" in that the other group members all gave the same wrong answer part of the time
  - c. A significant proportion of participant went along with the group's opinion even when they knew it was wrong
  - d. **normative social influence**: influence resulting from a person's desire to gain approval or avoid disapproval
  - e. **informational social influence**: influence resulting from one's willingness to accept others' opinions about reality
16. What did Milgram's studies reveal about obedience to authority?
  - a. Revealed that a number of people would obey orders from authority figures, even if the orders conflict with their own attitudes
  - b. Raised many ethical issues
17. What are some of the reasons that explain why people tend to obey the orders of those in authority?
  - a. Socialization
  - b. Foot in the door effect

- c. Confusion about attitude
- d. buffers
- 18. Give examples of situations in which obedience to authority is considered socially acceptable
  - a. Obeying traffic laws, school rules, etc.
- 19. How do sociobiologists explain human aggression?
  - a. They believe that the genes control aggression
- 20. According to learning theorists, how do children learn aggressive behavior?
  - a. Children are reinforced when they act aggressively
  - b. Observing the behavior of others
- 21. Explain why it is important to understand the causes of aggression in order to find solutions to the problem of violence in society
  - a. Preventing aggression depends on eradication or controlling its cause
  - b. If aggression is learned, for example, then preventing it requires reinforcing non-aggressive behavior and remove aggressive acts from view
- 22. Explain the principle of group dynamics
  - a. Following norms and specified norms
  - b. **Social loafing**- individuals will not put in as much effort when acting as a part of a group as they do when acting alone
  - c. **Deindividuation**: the loss of self-awareness and self-restraint occurring in group situations that foster arousal and anonymity
  - d. Group polarization- tendency of a group to make more extreme decisions than the group members would make individually
  - e. Groupthink- coined by Janis; the tendency for some groups to make bad decision
    - i. An individual may not speak up when in a group

**ALTRUISM**: the unselfish regard for the welfare of others

- **bystander effect**: any particular bystander was less likely to give aid with other bystanders present
- the norms for helping
  - social exchange theory: the theory that out social behavior is an exchange process, the aim of which is to maximize benefits and minimize costs
  - reciprocity norm: an expectation that people will help, not hurt, those who have helped them
  - social responsibility norm: people will help those dependent upon them

**PEACEMAKING**

- cooperation
  - **superordinate** goals: shared goals that overrode differences and that could be achieved thru cooperation
- communication
- conciliation
  - GRIT
    - a. **contact theory**: contact between hostile groups will reduce animosity
      - reach a **superordinate** goal: goal that benefits all members of the group
    - b. Setting an example of tolerance for others
    - c. Working toward common goals in groups of people with mixed racial, gender or ethnic background